

REMARKS

Applicants respectfully traverse the rejections in the outstanding Office Action, and request that they be withdrawn in view of the following Remarks.

Election/Restriction

In response to a restriction requirement, election is made without traverse to prosecute the invention of Group I, claims 1-5 and 12-14. Claims 6-11 are withdrawn from further consideration as being drawn to a non-elected invention. In compliance with 37 CFR 1.48(b), it is to be entered that all of the originally named inventors are co-inventors of the claims now remaining in the application.

Drawings

The Drawings are objected to because as failing to comply with 37 CFR 1.84(p)(4) because the reference character "92" has been used to designate both the curved rail and motor (page 11, line 13). A careful review of FIGs. 6-7-8 shows that the character "92" is always used to identify the curved slide 92 and that the character "94" is always used to identify the motor 94; thus it is believed that the Drawings are correct and that replacement Drawings are not required in this instance. The error is within the specification wherein motor 94 was inadvertently mis-identified by reference character "92". A substitute paragraph [0039] with this correction accompanies this Reply. If this change is not acceptable to the Examiner, Applicant will comply with any required corrective action requested in the next Office action.

The Drawings are also objected to because as failing to comply with 37 CFR 1.84(p)(4) because the reference character "84W" has been used to designate both the wash line and wash tube (page 11, line 20). A corrected Figure 9 in compliance with 37 CFR 1.121(d) accompanies this reply to the Office action in which the wash tube is

identified by the reference character "83 ". A substitute paragraph [0040] with this correction in the specification accompanies this Reply.

Specification

The specification is objected to because of an informality concerning the serial number of a co-pending U.S. patent application. The missing information is supplied in a substitute specification paragraph [0036] accompanying this reply.

Claim Rejections – 35 USC §112

Claims 1-5 and 12-14 are rejected under U. S. C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In response, claims 1 and 12 been amended to distinctly specify the step of cleansing the used cuvette. Claims 3 and 13 are rejected as being indefinite because it is not clear how to dry residues from the miniwashes. In response, claims 3 and 13 been amended to specify vacuum drying of the cuvette. Support for this amendment may be found within the specification at paragraph [0041]. Claim 5 has been amended to provide proper antecedent basis.

Claim Rejections –35 USC §102

Claims 1 and 12 are rejected under 35 USC 102(b) as being anticipated by Choperena et al (US 5,380,487). The Examiner cites Choperena as disclosing "subjecting the vessel to a first series of cleaning operations before a first group of assays is scheduled to be next performed, and subjecting a (vessel to) a second series of cleaning operations before a second group of assays is scheduled to be next performed." (Claims 1 and 12)

This recitation is respectfully objected to for the following reasons:

- 1) Choperena never washes (cleanses) a reaction vessels or reuses a washed reaction vessel. As disclosed at Col. 15, lines 10-32:

A reaction vessel 52' containing a sample for which testing is completed . . . is ready for removal from the analyzer. That vessel will be moved into . . . the wash wheel. . . . the used reaction vessel 52' will move into . . . the incubator belt . . . After the used reaction vessel is transferred onto the incubator belt it is carried . . . to the incubation transfer station . . . onto the vessel chain which becomes the vessel disposal chain. As the vessel chain is moved . . . the used reaction vessel is transported to the waste chute 162 . . . to a waste collection container 164, where a number of used vessels may accumulate for later disposal.

- 2) Choperena uses new reaction vessels after used vessels are disposed of.

As disclosed at Col. 11, lines 35:

The new vessel loader 72 is provided . . . to supply new reaction vessels to the analyzer . . . as the analyzer disposes of used reaction vessels. The new vessel loader 72 desirably presents . . . parallel lines of new vessels to the chain 70, with the lines being spaced to position a new vessel . . . on the vessel chain.

- 3) Choperena does refer to a washing procedure (see Col. 24, lines 22-39)
however this washing is only of the probe used to aspirate and dispense sample and reagent into a vessel and is not washing of a used reaction vessel.

It thus appears that Choperena's use of the word "wash" may have inadvertently interpreted by the Examiner to mean a used vessel cleaning wash. However, as is customary within clinical chemistry, Choperena is using "wash" to describe a well known sample-reagent separation process that is an integral part of a clinical assay process. This is described at Col. 15, lines line 44 to Col. 16, line 4:

Referring again to FIGS. 4-8, the wash-cycle path 101 extends from the first wash transfer station 80 to a second wash transfer station . . . where the reaction vessel may be acted upon. . . . In a preferred embodiment, if a wash and separation step is required at all for a particular assay the following occurs as the reaction vessel is indexed ahead one position during every cycle of the wash wheel. At the first position . . . add a predetermined amount of wash solution to the reaction vessel and the contents of the vessel. The reaction vessel is then indexed forward to a position on the wash cycle having a pair of magnets (not shown) mounted on opposing walls of the wash-cycle path which cause the magnetic particles to be pulled from solution. Aspirating means (not shown) at this position along the wash-cycle path then withdraw the liquid from the reaction vessel. In the embodiment of the invention described here, the reaction vessel is indexed forward through a total of six positions, three positions where wash solution is added and mixing occurs alternating with three magnetic separation-aspiration positions.

This magnetic separation or "wash" process is frequently employed in clinical analyzers when performing heterogeneous immunoassays that require separation of

antibody-tracer bound to a solid phase and free factions of a tracer. Paramagnetic particles having an antibody attached thereto are frequently used as the solid phase and separation of the solid phase is achieved by the application of a magnetic field, drawing the particles to the side or base of a vessel. The supernatant solution containing the unwanted free factions is then "washed" away by aspiration or decantation (Immunoassay Handbook, Stockton Press, 1994, New York, p 57, 60).

In contrast, applicant's invention, as defined by claim 1, is a method for cleansing a used reaction cuvette using either a first or second series of cleansing operations depending upon what assay is scheduled to be next performed in the to-be-cleaned, used cuvette. Since Choperena does not disclose cleaning a used cuvette and teaches disposing of used cuvettes, it cannot be said that Choperena anticipates the claimed invention. It is thus believed that the rejection is unfounded and withdrawal of the rejection is respectfully requested.

Claim Rejections –35 USC §103

Claims 2-5, 13 and 14 are rejected under 35 USC 103(a) as being unpatentable over Choperena et al in combination with Sakagami (US Patent 4,785,407) and Jordan (US Patent 4,325,910).

As discussed above, Choperena teaches disposing of a used reaction vessel (cuvette) and washes only the probe and "washes away" unwanted free factions after a sample-reagent separation process as part of a clinical assay process. The Examiner cites Sakagami for teaching detecting the dirtiness level of a during cleaning and rewash a cuvette having dirtiness above a threshold level (Col. 5, lines 14-32) and concludes that it would have been obvious for one skilled in the art to use the dirtiness detecting step taught by Sakagami in Choperena's cleaning process to improve the cleaning process. This may be true with respect to the probe, however, Choperena does not wash used cuvettes with either a first or second series of cleansing operations and then reuse them as taught by Applicant. Consequently, the proposed modification of Choperena using the Sakagami reference fails to teach Applicant's used cuvette cleaning scheme.

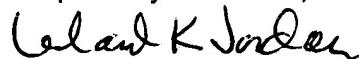
The Examiner further cites Jordan for teaching drying a cuvette and discharging wash liquid (Col. 12, lines 45-48; Col. 13, lines 12-17) and concludes that it would have been obvious for one skilled in the art to use these drying and discharging steps taught by Jordan in Choperena's cleaning process to improve the cleaning process. Again, while this may be true with respect to the probe, Choperena does not wash used cuvettes with either a first or second series of cleansing operations and then reuse them as taught by Applicant. Consequently, the proposed modification of Choperena using the applied Jordan reference fails to teach Applicant's used cuvette cleaning scheme.

Applicant thus respectfully submits that the combination of Choperena, Sakagami, and Jordan do not anticipate nor render claim 1 obvious because such a combination does not teach each and every claim limitation. In particular, no combination of the references teach Applicant's method for cleansing a used reaction cuvette with either a first or second series of cleansing operations depending upon what assay is scheduled to be next performed in the to-be-cleaned, used cuvette. Furthermore, the difference or differences in the claim over the applied references, and the proposed modification of the applied reference cannot replicate Applicant's cleaning method. Accordingly, Applicant respectfully submits that the claims are allowable over the prior art, and requests removal of this rejection.

Conclusion

Applicants believe that this application contains patentable subject matter and that the foregoing amendments provide a basis for favorable consideration and allowance of all claims; such allowance is respectfully requested. If any matter needs to be resolved before allowance, the Examiner is encouraged to call Applicant's representative at the number provided below.

Respectfully submitted,



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